

TECHNICAL DATA
DATA SHEET 4014, REV. C

HERMETIC POWER SCHOTTKY RECTIFIER

Very Low Forward Voltage Drop

Applications:

- Switching Power Supply • Converters • Free-Wheeling Diodes • Polarity Protection Diode

Features:

- Very Low Forward Voltage Drop
- High Efficiency
- High Frequency Application
- Guard Ring for Enhanced Durability and Long Term Reliability

MAXIMUM RATINGS

ALL RATINGS ARE @ $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

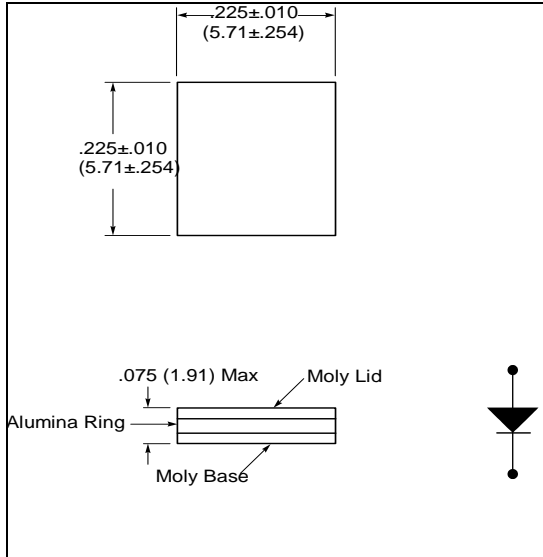
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	30	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100^\circ\text{C}$)	I_O	3	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine)	I_{FSM}	55	Amps
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	7.07	$^\circ\text{C/W}$
MAXIMUM OPERATING TEMPERATURE RANGE	T_{op}	-65 to + 175	$^\circ\text{C}$
MAXIMUM STORAGE TEMPERATURE RANGE	T_{stg}	-65 to + 175	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

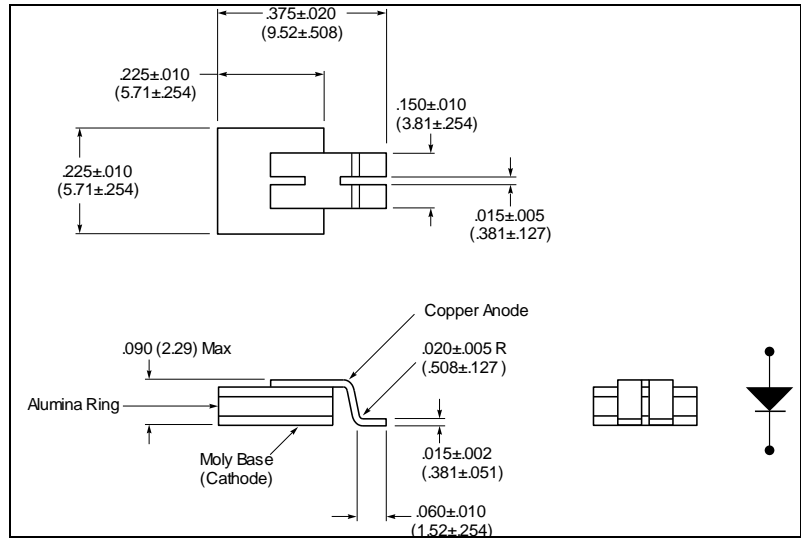
CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 3$ Amps) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	V_f	0.49 0.39	Volts
MAXIMUM REVERSE CURRENT (I_r @ 30V PIV) $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_r	0.4 20	mA
MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$)	C_T	220	pF

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MECHANICAL DIMENSIONS: In Inches / mm

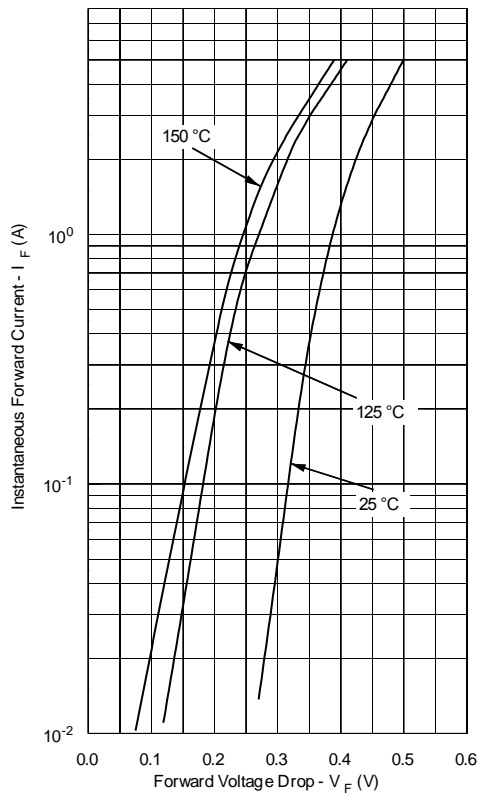


SHD-1

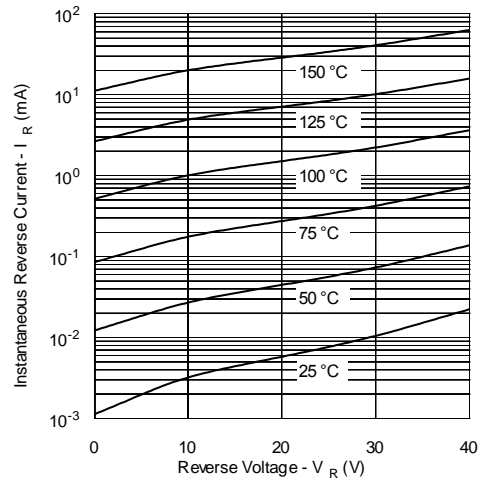


SHD-1B

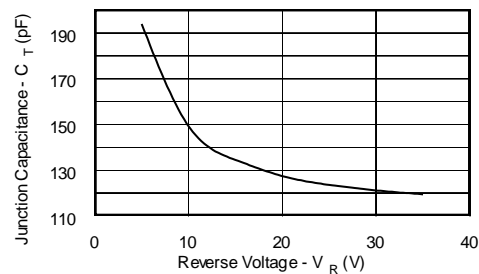
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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